

Case 3525***Tricoelia variopedata* Renier, [1804] (currently *Chaetopterus variopedatus*; Annelida, Polychaeta): proposed conservation of the specific name**

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Abstract. The purpose of this application, under Article 81.1 of the Code, is, firstly, to conserve the widespread current usage of the name *Chaetopterus variopedatus*, which is used by polychaete taxonomists and ecologists around the world despite the fact that it is derived from the officially unpublished works of Renier. Furthermore, we request an amendment to the entry for Renier [1804b] in the Official Index of Works in Zoology to make it clear that some names in that unpublished work have been validated by the Commission.

Keywords. Nomenclature; taxonomy; Polychaeta; CHAETOPTERIDAE; *Chaetopterus variopedatus*; Adriatic.

1. The works known as Renier (1804a), Renier (1804b) and Renier (1807) have all been rejected for not being properly published; see Opinion 316 (Opinions and Declarations 9(5): 91–106, December 1954) and Opinion 427 (Opinions and Declarations 14(11): 281–310, October 1956). However, while some names established in those works have been explicitly rejected (e.g. *Amphinome coccinea* Renier, [1804] (Opinion 316); *Discoides* Renier, [1804] and *Scolixedion* Renier, [1804] (Opinion 436, Opinions and Declarations, 15(1): 1–24, January 1957); *Tricoelia* Renier, [1804], Opinion 427), some other names have been explicitly validated (e.g. *Cerebratulus marginatus* Renier, 1804 in Opinion 477 (Opinions and Declarations 16(20): 343–352, July 1957); *Polycitor crystallinus* Renier, 1804 in Opinion 478 (Opinions and Declarations 16(21): 353–364, July 1957); *Tubulanus polymorphus* Renier, 1804, Opinion 1486 (BZN 45(2): 157–158, June 1988). This application is one of three, which attempt to resolve confusion surrounding the names of polychaetes which ultimately derive from these unpublished works.

2. Gibin & Tiozzo (1981) state that Renier's [1804a, b] works were intended to be part of a larger work entitled *Prodromo di osservazione sopra alcuni esseri viventi, della classe dei vermi, abitanti nel mar Adriatico, nelle lagune e nei litorali veneti*. After his death, certain of Renier's notes and papers were gathered together and edited/updated by a small committee, with the 'principale compilatore ed ordinatore dell'Opera' being G. Meneghini. This work is cited here as Meneghini (1847).

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3. The name *Tricoelia variopedata* is first found in Renier [1804b, p. 18]. The species was further described under that name in Meneghini (1847, pp. 33–40, 119, pl. 8). There are two versions of Meneghini's plate 8, one shaded but not labelled, the other labelled but not shaded. Both versions of the plate have the name TRICELIA VARIOPEDATA centered at the bottom of the page, below the figures. *Tricoelia* is the Italian name for the genus *Tricoelia* – Renier often named his species in Latin, Italian and French, which has caused some confusion in the past. Meneghini (1847) also stated that the species *Chaetopterus pergamentaceus* Cuvier, 1830 and *Chaetopterus norvegus* (the incorrect subsequent spelling of *C. norvegicus* Sars, 1835, p. 47) belonged in the genus *Tricoelia* Renier, 1804.

4. The generic name *Chaetopterus* was erected by Cuvier (1830, p. 208) for one polychaete species – *Chaetopterus pergamentaceus* Cuvier, 1830 from the Antilles. *C. pergamentaceus* is the type species of the genus *Chaetopterus* by monotypy. The name *Chaetopterus* Schlegel in Temminck & Schlegel, 1844 was applied to a fish, which was described but not given a specific name (the first included fish species was probably *Chaetopterus sieboldii* Bleeker, 1854). This fish generic name is a junior homonym of the polychaete generic name and not considered further here.

5. Joyeux-Laffuie (1890) synonymised the nine European species of the polychaete genus *Chaetopterus* which had been erected by that date with *Chaetopterus variopedatus* (Renier, 1804), and said that the six additional species from overseas that he knew of were probably also synonyms. Fauvel (1926) agreed and synonymised three later species with *C. variopedatus*. Hartman (1959, pp. 395–396) listed 22 specific names and one subspecific name as synonyms of *Chaetopterus variopedatus* and said in a note 'Most authors recognise a single species in the genus; the various specific names are sometimes retained to designate geographic populations but reliable specific distinctions have not been identified'.

6. *Chaetopterus variopedatus* has been erroneously quoted as the type species of *Chaetopterus* Cuvier, 1827 by Hartman (1959, 1968), Fauchald (1977) and Gilbert (1984). The references to *Chaetopterus* Cuvier, 1827 are a mistake probably derived from Hartman (1951), who refers to 'Griffith's Cuvier', a 16 volume work consisting of a translation of Cuvier's work from French to English, with additions by various other authors, published in parts between 1824 and 1835 (Cowan, 1969). *Chaetopterus* is mentioned in volume 13 pages 27–28 of 'Griffith's Cuvier', which is presumably in part 34 which was published in December 1832. This volume is listed in the references of this submission as Griffith & Pidgeon (1832–1833).

7. It is not now certain that *C. variopedatus* and *C. pergamentaceus* are synonymous. *Chaetopterus variopedatus* Renier, 1804, as understood from the references above, has been recognised as a species complex and work is under way to identify the constituent species (Petersen, 1984a, b, 1997; Osborn et al., 2007; Martin et al., 2008; Nishi et al., 2009). The name *C. pergamentaceus* has been used in 33 publications from 1945–2008, according to the Zoological Record Archive (<http://portal.isiknowledge.com/portal.cgi?DestApp=ZOOREC&Func=Frame>).

8. However, under Article 11 of the Code, whether *C. variopedatus* and *C. pergamentaceus* are recognised as separate species or regarded as synonymous, in which case *C. variopedatus* is to have priority over *C. pergamentaceus* in the interests of nomenclatural stability, *C. variopedatus* would require a new name, as *Tricoelia*

variopedata Renier, [1804b p. 18], is officially unpublished. *Chaetopterus variopedatus* attributed to Renier (1804) is reported from around the world (e.g. Fauvel, 1927; Uschakov, 1955; Gibbs, 1971; Day, 1973; Bellan, 1978; Hobson & Banse, 1981; Kirkegaard, 1981; Gilbert, 1984; Hartmann-Schröder, 1985, 1996; Huang, 2001; Simboura & Nicolaidou, 2001), and is often used in physiological/developmental work (a search of the ISI Web of Knowledge on <http://wos.mimas.ac.uk/> revealed 24 such papers with *Chaetopterus variopedatus* in their titles from 1981 to early 2006). It is also commonly used as an example in field guides and text-books (e.g. Campbell, 1976; Fish & Fish, 1996). These reports will represent many superficially similar species (see paragraph 8), but losing such a well-known species name would cause confusion among ecologists, physiologists and students around the world. Melville (1983) has already made a proposal regarding *T. variopedata* (although with wrong date and spelling of the generic name due to the confusion mentioned in para. 3 above), but this has not been voted on by the Commission.

9. The generic name *Tricoelia* Renier, [1804b, p.18], has been explicitly rejected by the Commission (Opinion 427). We are not asking the Commission to validate this generic name, as it would become a senior synonym of *Chaetopterus*. *Chaetopterus* Cuvier, 1830 is the type genus of the family CHAETOPTERIDAE, and if, following Article 40.1, the generic name were changed to *Tricoelia* but the family name remained CHAETOPTERIDAE, further confusion would be possible (cf. Pettibone, 1981; Melville, 1983).

The Official Index

10. The entries for Renier's works in the Official Index (Melville & Smith, 1987) are misleading in that they do not mention that some of the names contained therein have been validated, therefore implying that all the names are to be rejected, especially when compared to the entry for the rejected work of Brisson (1762) (see Smith (2001) which lists the available names found in that work). We consider that the entry for Renier, 1804b needs amending by the addition of a list to show that *Cerebratulus marginatus* Renier, 1804; *Polycitor crystallinus* Renier, 1804; *Tubulanus polymorphus* Renier, 1804 and *variopedata* as published in *Tricoelia variopedata* Renier, 1804, have all now been made available.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific name *variopedata* as published in the binomen *Tricoelia variopedata* Renier, [1804b], is available from Renier (1804b);
- (2) to place on the Official List of Generic Names in Zoology the name *Chaetopterus* Cuvier, 1830 (gender: masculine), type species by monotypy *Chaetopterus pergamentaceus* Cuvier, 1830;
- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *variopedata* Renier, [1804b], as published in the binomen *Tricoelia variopedata* Renier, [1804b], and as ruled to be an available name in (1) above;
 - (b) *pergamentaceus* Cuvier, 1830, as published in the binomen *Chaetopterus pergamentaceus* Cuvier, 1830 (specific name of the type species of *Chaetopterus* Cuvier, 1830);

- (4) to amend the entry for Renier, [1804b], in the Official Index of Works in Zoology to record that the name *variopedata* as published in *Tricoelia variopedata* Renier, [1804b], is available from Renier, 1804b, as ruled in (1) above, and that *Cerebratulus marginatus* Renier, 1804; *Polycitor crystallinus* Renier, 1804 and *Tubulanus polymorphus* Renier, 1804 are available as shown in paragraph 1 of this Application.

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